



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,576	11/21/2003	Heiko K. Sacher	CS23123US	3260
7590	12/18/2009		EXAMINER	
Motorola, Inc. 600 North U.S. Highway 45 Libertyville, IL 60048			PESIN, BORIS M	
			ART UNIT	PAPER NUMBER
			2174	
			MAIL DATE	DELIVERY MODE
			12/18/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/719,576	SACHER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	BORIS PESIN	2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 03 September 2009.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,5-11,16-20,25-29,35 and 36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,5-11,16-20,25-29,35 and 36 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|  | 6) <input type="checkbox"/> Other: _____ .                        |

**DETAILED ACTION**

***Response to Amendment***

This communication is responsive to the amendment filed 09/03/2009.

Claims 1, 5-11, 16-20, 25-29 and 35-36 are pending in this application. Claims 1, 25, and 35 are independent claims. In the amendment filed 09/03/2009, none of the claims were amended and claims 35 and 36 were added as new. This action is made Non-Final.

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/03/2009 has been entered.

***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 35 and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by Williams (US 7155683).

With respect to claim 35, Williams teaches a portable electronic device comprising: a display for displaying a content string including one or more content elements (See Figure 9); a user input for entering the one or more content elements of the content string (See Figures 5 and 6); and a user interface coupled to the display and further coupled to the user input (See Figures 5 and 7), wherein the user interface is adapted to:

determine a most probable completion alternative (See Figure 9, Element 78); cause to the most probable completion alternative to be displayed (See Figure 9, Element 78);

and adding the most probable completion alternative to the content string in response to receiving a signal from the user input that the user has accepted the most probable completion alternative, wherein the user interface comprises a navigation key having a first set of controls for acceptance or non-acceptance of a most probable completion alternative currently displayed at the display and a second set of controls for changing or overriding the most probable completion alternative currently displayed at the display (See Column 6, Lines 43-52 and Column 7, Line 43 – Column 8, Line 14).

With respect to claim 36, Williams teaches the portable electronic device of claim 35, wherein: the first set of controls includes first and second controls at opposing positions of the navigation key; and the second set of controls includes third and fourth controls at opposing positions of the navigation key different from the positions of the first and second controls (See Column 6, Lines 43-52 and Column 7, Line 43 – Column 8, Line 14 and Figures 5 and 7 where all the buttons are opposing one another).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 5-10, 16-20, and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams (US 7155683) in view of Bodnar et al. (US 6310634).

In regards to claim 1, Williams teaches a method of operating an electronic device comprising the steps of: initiating entry of a content string by receiving a first key selection input, said first key corresponding to a first set of textual characters (Figure 6 and Column 6, Line 1- Column 6, Line 52); determining a most probable completion alternative using a database, said completion alternative being either a most probable character selected from said first set of textual characters or a most probable sub-string, said sub-string beginning with said most probable character and including at

Art Unit: 2174

least one additional character (Figure 6 and Column 6, Line 1- Column 6, Line 52); displaying the most probable completion alternative in a content string entry line of a display of said electronic device (Figure 6); receiving a second input, said second input being either a second key corresponding to a second set of textual character or a selection key (Figure 6 and Column 6, Line 1- Column 6, Line 52, the data is entered character by character); and adding the most probable completion alternative to the content string entry line of said for said second input being said selection key, and adding a second completion alternative for said second input being said second key, said second completion alternative being either a most probable combination of said most probable first character selected from said first set of textual characters and a most probable second character selected from said second set of textual characters, or a most probable second sub-string, said second sub-string beginning with said most probable first character and said most probable second character and including at least a most probable third character (Figure 6 and Column 6, Line 1- Column 6, Line 52, the data is entered character by character).

Williams does not teach determining a most probable completion alternative using a personalized and learning database. Bodnar teaches, "By remembering what the user has previously inputted and by using context-sensitive menus and adaptive "quick" lists, the system can anticipate what the user needs to do at any given time and can guide the user through a step-by-step process to complete each task, thus facilitating the tasks that users most often perform." (Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Williams

with the teachings of Bodnar and include a learning database with the motivation to provide the user with a faster method of inputting words in the system.

In regards to claim 5, Williams and Bodnar teach the method of operating an electronic device as defined in claim 1, further comprising the steps of: detecting a user input for going back in the content string after the adding step; and eliminating the most probable completion alternative from the content string (Bodnar Figure 12B, Element 103).

In regards to claim 6, Williams and Bodnar further teach a method of operating an electronic device as defined in claim 5, wherein the user input comprises a user pressing a left control of a navigation key (Column 8, Lines 51-63).

In regards to claim 7, Williams and Bodnar teach the method of operating an electronic device as defined in claim 1 wherein the database comprises recently used data selected from a group consisting of one or more new words, one or more word associations, one or more context associations, one or more sensitivity associations, one or more Uniform Resource Locators, and one or more electronic mail addresses ("By remembering what the user has previously inputted and by using context-sensitive menus and adaptive "quick" lists, the system can anticipate what the user needs to do at any given time and can guide the user through a step-by-step process to complete each task, thus facilitating the tasks that users most often perform." Bodnar, Abstract).

In regards to claim 8, Williams and Bodnar teach the method of operating an electronic device as defined in claim 1, further comprising the steps of: dismissing the most probable completion alternative when the user does not accept the most probable

completion alternative; and displaying a next most probable completion alternative (Bodnar Figure 1A, Element 104).

In regards to claim 9, Williams and Bodnar teach the method of operating an electronic device as defined in claim 1, further comprising the steps of: overriding the most probable completion alternative by a user input; and displaying a next most probable completion alternative (Bodnar Figure 1A, Element 104).

In regards to claim 10, Williams and Bodnar teach the method of operating an electronic device as recited in claim 9, wherein the step of overriding comprises: the user pressing a first set of controls of a navigation key to indicate the overriding; and the user pressing a second set of controls of the navigation key to scroll through one or more completion alternates (Bodnar Figure 1A, Element 103).

Claim 25 is similar in scope to claim 1; therefore it is rejected under similar rationale.

In regards to claim 26, Williams and Bodnar teach a portable communication device as defined in claim 25 wherein the user input comprises: a navigation key having at least two control keys (See Figures 5 and 7), wherein a first control key provides for accepting of the most probable completion alternative (See Figures 5 and 7).

In regards to claim 27, Williams and Bodnar teach a portable communication device as defined in claim 26 wherein a second control key provides for removing the added most probable completion alternative from the content string (See Figures 5 and 7).

In regards to claim 28, Williams and Bodnar teach a portable communication device as defined in claim 27 wherein a third control key provides for requesting a next most probable completion alternative (See Figures 5 and 7).

In regards to claim 29, Williams and Bodnar teach a portable communication device as defined in claim 27 wherein a third control key provides for overriding the most probable completion alternative (See Figures 5 and 7), and further wherein a fourth control key provides for scrolling through one or more completion alternates (See Figures 5 and 7).

Claims 11 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams (US 7155683) in view of Bodnar et al. (US 6310634) further in view of Simpson et al. (US 2004/0153963).

In regards to claim 11, Williams-Bodnar do not specifically teach identifying as part of said most probable completion alternative, a most probable phrase consisting of at least a first word and a second word, said first word and said second word corresponding to a phrase stored in said personalized and learning database; displaying the most probable phrase in said content string entry line of said display; and receiving a third input accepting said most probable phrase; and adding the most probable phrase to the content string entry line of said display in response to receiving said third input.

Simpson teaches identifying as part of said most probable completion alternative, a most probable phrase consisting of at least a first word and a second word, said first word and said second word corresponding to a phrase stored in said personalized and learning database; displaying the most probable phrase in said content string entry line of said display; and receiving a third input accepting said most probable phrase; and adding the most probable phrase to the content string entry line of said display in response to receiving said third input (See Paragraph 36 and 47). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Williams-Bodnar with the teachings of Simpson and include phrase completion capability with the motivation to provide the user with a simpler method of entering multiple words.

In regards to claim 16, Williams-Bodnar-Simpson teach all the limitations of claim 11. They further teach a method wherein said phrase includes at least three words and has a maximum number of words and wherein the user accepts at least two words but less words than said maximum number of words (Simpson See Paragraph 36 and 47).

In regards to claim 17, Williams-Bodnar-Simpson teach all the limitations of claim 11. They further teach a method wherein the user accepts the entire most probable phrase (Simpson See Paragraph 36 and 47).

In regards to claim 18, Williams and Bodnar teach all the limitations of claim 1. Williams-Bodnar-Simpson further teach the step of: editing the most probable next phrase (Simpson See Paragraph 36 and 47).

In regards to claim 19, Williams-Bodnar-Simpson teach all the limitations of claim 18. They further teach a method wherein the editing step comprises pressing a control of a navigation key to move the focus to a next word of said phrase and comparing the next word to one or more word alternates, said word alternates being part of a phrase alternate (Simpson See Paragraph 36 and 47).

In regards to claim 20, Williams-Bodnar-Simpson teach all the limitations of claim 11. They further teach a method further comprising the steps of: retrieving one or more phrases from the personalized and learning database (Simpson See Paragraph 36 and 47); displaying the one or more alternate phrases (Simpson See Paragraph 36 and 47); and reviewing the one or more alternate phrases by a user using one or more controls of a navigation key (Simpson See Paragraph 36 and 47).

### ***Response to Arguments***

Applicant's arguments filed 11/21/2008 have been fully considered but they are not persuasive.

In regards to the Applicant's argument that "Williams fails to describe the second input key corresponding to a second completion alternative, where the second completion alternative is either the most probable combination of the most probable first character selected from selected from the first set of textual characters and a most probable second character selected from the second set of textual characters or a most probable second sub-string," the Examiner respectfully disagrees. In Williams the completion alternative changes every time a textual character is entered. With each character, the alternative is the combination of the current character and a previous

entered character (See Figure 9, Element 78). Therefore, the Applicant's claim limitations are clearly taught by Williams.

***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BORIS PESIN whose telephone number is (571)272-4070. The examiner can normally be reached on Monday-Friday except every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Chow can be reached on (571)272-7767. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Boris Pesin/  
Primary Examiner, Art Unit 2174